

**REMARKS/ARGUMENTS**

**I. General Remarks.**

Applicants respectfully request reconsideration of the application in view of the amendments and remarks contained herein.

Applicants respectfully submit that these amendments add no new matter to the application and are supported by the specification as originally-filed. All the amendments are made in a good faith effort to advance the prosecution on the merits of this case. Applicants thank the Examiner for his careful consideration of this application, including the references Applicants have submitted.

**II. Disposition of the Claims.**

At the time of this Office Action, claims 1-102 were pending. Claims 1-12, 18, 19, 24, 35-45, 53-56 and 87-88 are rejected in this office action. Claims 20-23, 25-32 and 57-59 have been objected to as being dependent on a rejected base claim, but would be allowable if rewritten in independent form. Claims 1 and 35 have been amended. Claims 13-17, 33, 34, 46-52, 60-86, and 89-102 were withdrawn in response to the Restriction Requirement issued by the Examiner on March 29, 2007.

**III. Remarks Regarding the Rejections Under 35 U.S.C. § 103(a).**

Claims 1-12, 18, 19, 35-45, 53, 54, 87 and 88 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Reissued U.S. Patent No. Re 33,448 issued to Bauer (hereinafter “Bauer”) in view of U.S. Patent No. 3,158,166 issued to Warren (hereinafter “Warren”). The Examiner concedes that *Bauer* fails to disclose at least one feedback outlet leaving each of the feedback passages and at least one exit flowline leaving the at least one feedback outlet, wherein the at least one exit flowline has an exit port. Office Action, at 2. The

Examiner relies on *Warren* for disclosing this limitation. Specifically, with respect to this rejection, the Office Action states:

Warren discloses at least one feedback outlet (where 53 and 56 leave 51 and 54) leaving each of the feedback passages as seen in Figure 4 and at least one exit flowline (53 and 56) leaving the at least one feedback outlet, wherein the at least one exit flowline has an exit port (col. 9, line 52 to col. 10, line 2). It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the exit flowlines off of the feedback passages of Warren onto the fluidic oscillator of Bauer, to control the pulsating fluid flow (col. 9, line 72 to col. 10, line 1).

Office Action, at 2-3.

The Applicants respectfully traverse this rejection. The present invention is directed to apparatuses and methods for creating pulsating fluids. Specification, paragraph [0001]. In one embodiment, the present invention is capable of generating pulsating fluids through exit flowlines created in a feedback passage. Specification, paragraph [0035]. Specifically, as the fluid travels through feedback passages 307 or 307', a portion of the fluid will be drawn off by feedback outlet 311 or 311', respectively. Specification, paragraph [0035]. The portion of fluid entering feedback outlets 311 or 311' will then exit the apparatus through exit flowlines 201 or 201', respectively. Specification, paragraph [0035]. Independent claims 1 and 35 have been amended to recite that a pulsating fluid flow is generated through the exit port. Similarly, independent claims 87 and 88 recite discharging the fluid through the exit flowline to form a pulsating jet.

In contrast, *Warren* is completely silent with respect to generation of pulsating fluid or a pulsating jet through items 53 and 56 identified by the Examiner as the exit flowline. The Examiner has identified items 51 and 54 in *Warren* as the feedback passages. However, items 51 and 54 act as capacitance chambers with valves 52, 54 controlling the amount of fluid to be exhausted from each chamber through outlets 53 and 56 respectively. *Warren*, Col. 9, lines

56-72. Furthermore, the entry and exit from each chamber is offset to preserve the capacitance of the chambers 51 and 54. *Warren*, Col. 9, lines 52-66. The system of *Warren* operates in the following manner:

The frequency of oscillation [is] controlled by valves 52 and 55 alone or in concert by increasing the effective capacitance by bleeding fluid, and, therefore, delaying the pressure rise in the capacitance. The output signal pulses, taken from receivers 45 and 47, can be timed over a wide range of variation.

*Warren*, Col. 9, lines 72-75; Col. 10, lines 1-2. Stated otherwise, the valves 52, 55 are used to control the amount of fluid that exits from the capacitance chambers in the passages 51, 54 in order to control the frequency of fluid pulses that exit the system through passages 45, 47. There is no generation of a pulsating fluid or a pulsating jet through the outlets 53 and 56. Instead, the passages 51, 54 are merely used to control the frequency of the pulsating fluids that are generated through receivers 45 and 47. In fact, *Warren* teaches away from the generation of pulsating fluids through the outlets in the feedback passages 51 and 54. The passages 51 and 54 include a capacitance chamber with a larger cross sectional area compared to the rest of the passage. The outlets 53, 56 identified by the Examiner as the exit flowlines leave the feedback passages 51, 54 at the capacitance chamber. Therefore, not only does *Warren* not teach the generation of a pulsating fluid or pulsating jet through outlets 53 and 56, the existence of the capacitance chamber in the passages 51 and 54 and the presence of the valves 52 and 55 both serve to impede the generation of such pulsating fluid through the outlets 53 and 56.

*Bauer* is silent with respect to exit flowlines leaving a feedback passage and therefore, it also fails to disclose the generation of pulsating fluid through the exit port as recited in amended independent claims 1 and 35 and independent claims 87 and 88. Similarly, *Warren* fails to disclose the generation of a pulsating fluid or pulsating jet through an exit flowline leaving a feedback passage. Therefore, *Warren* fails to disclose that which *Bauer* lacks and

independent claims 1, 35, 87 and 88 are allowable over *Bauer* and *Warren*. Claims 2-12, 18, 19, 36-45, 53 and 54 depend from independent claims 1 and 35 and are allowable for at least the same reasons.

Claims 24, 55 and 56 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Bauer* and *Warren* as applied to claims 1 and 35, and further in view of U.S. Patent No. 4,157,161 issued to Bauer (hereinafter “*Bauer II*”). *Bauer II* is directed to a windshield washer comprising a nozzle in which a liquid jet is formed and repetitively transversely swept before egressing from the nozzle body. As discussed above with reference to independent claims 1 and 35, *Bauer* and *Warren* fail to disclose a feedback passage with an exit flowline capable of generating a pulsating fluid or pulsating jet. Similarly, *Bauer II* fails to disclose the generation of a pulsating fluid or pulsating jet through flowlines exiting a feedback passage. Therefore, claims 24, 55 and 56 are allowable over *Bauer*, *Warren* and *Bauer II*.

#### **IV. Claim Objections**

Claims 20-23, 25-32 and 57-59 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form. As discussed above, independent claims 1 and 35 are now in condition for allowance. Claims 20-23, 25-32 and 57-59 depend directly or indirectly from independent claims 1 and 35. Therefore, the applicants respectfully request a withdrawal of these objections.

#### **V. No Waiver**

All of Applicants’ arguments and amendments are without prejudice or disclaimer. Additionally, Applicants have merely discussed example distinctions from the cited references. Other distinctions may exist, and Applicants reserve the right to discuss these additional distinctions in a later Response or on Appeal, if appropriate. By not responding to

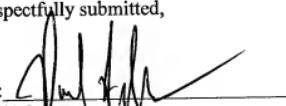
additional statements made by the Examiner, Applicants do not acquiesce to the Examiner's additional statements, such as, for example, any statements relating to what would be obvious to a person of ordinary skill in the art.

**SUMMARY**

In light of the above remarks, Applicants respectfully request reconsideration and withdrawal of the outstanding rejections. Applicants further submit that the application is now in condition for allowance, and earnestly solicit timely notice of the same. Should the Examiner have any questions, comments or suggestions in furtherance of the prosecution of this application, the Examiner is invited to contact the attorney of record by telephone, facsimile, or electronic mail.

Applicants believe that there are no additional fees due in association with the filing of this Response. However, should the Commissioner deem that any fees are due, including any fees for extensions of time, Applicants respectfully request that the Commissioner accept this as a Petition Therefore, and direct that any additional fees be charged to Baker Botts L.L.P. Deposit Account No. 02-0383, Order Number 063718.0398.

Respectfully submitted,

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Date: December 12, 2007

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